

Title (en)  
APPARATUS AND METHOD FOR CHARACTERIZATION OF A DUCTILE MEMBRANE, SURFACE AND SUB-SURFACE PROPERTIES

Title (de)  
VORRICHTUNG UND VERFAHREN ZUR CHARAKTERISIERUNG EINER DUKTILEN MEMBRAN, OBERFLÄCHEN- UND UNTEROBERFLÄCHENEIGENSCHAFTEN

Title (fr)  
APPAREIL ET PROCÉDÉ DE CARACTÉRISATION DE PROPRIÉTÉS D'UNE MEMBRANE DUCTILE, D'UNE SURFACE ET D'UNE SOUS-SURFACE

Publication  
**EP 3821347 A1 20210519 (EN)**

Application  
**EP 18925875 A 20180713**

Priority  
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Abstract (en)  
[origin: WO2020013868A1] An ultrasound signal processor uses an excitation generator to cause displacement of a membrane or surface while a series of ultrasound pulses are applied to the membrane or surface. Phase differences between a transmitted signal and received signal are examined to determine the movement of the membrane or surface in response to the applied excitation. An examination of the phase response of the membrane or surface provides a determination as to whether the fluid type behind the membrane or surface is one of: no fluid, serum fluid, or purulent fluid.

IPC 8 full level  
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CPC (source: EP KR)  
**G01S 7/52042** (2013.01 - KR); **G01S 7/52079** (2013.01 - KR); **G01S 7/523** (2013.01 - KR); **G01S 7/539** (2013.01 - EP KR); **G01S 15/02** (2013.01 - EP KR)

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**WO 2020013868 A1 20200116**; AU 2018431763 A1 20210204; CA 3105427 A1 20200116; CN 112673361 A 20210416; EP 3821347 A1 20210519; EP 3821347 A4 20220323; JP 2021535360 A 20211216; JP 2023063592 A 20230509; JP 7249400 B2 20230330; KR 102594614 B1 20231025; KR 20210030388 A 20210317; KR 20230153501 A 20231106

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